

Abstract of the Disclosure

A support structure supports powered lifting means for lifting a patient from a wheelchair and moving the patient over a powered treadmill where the patient is lowered onto the treadmill. A control panel with a mirror thereon is supported at one end of the support structure, and a touch screen data entry/display device is supported by the panel. Two similar housings are disposed at opposite sides of the treadmill. Each housing pivotally supports a support arm which can swing away from the treadmill to facilitate access to the treadmill. Each support arm pivotally supports a first depending arm, and a second depending arm is pivotally supported therefrom. A pair of servo motors are supported by each support arm and are drivingly connected to the first and second depending arms to independently move the depending arms about the pivot axes thereof. A first attachment cuff is connected to the first depending arm for attachment to a patient's leg just above the knee. A second attachment cuff is connected to the second depending arm for attachment to a patient's ankle. The support arms are vertically adjustable, and the attachment cuffs are horizontally adjustable. The first attachment cuff is vertically adjustable, and the second attachment cuff floats vertically relative to its depending arm. Control means is connected to the drive means for the treadmill and the servo motors which move the depending arms to cause the treadmill and the depending arms to operate in a coordinated manner to cause the legs of the patient to move in a desired gait. Sensor means is also provided for sensing the home position as well as possible over-travel of the knee joint of the device.